

## **PLAZGAL PETG**

# EXTRUDED POLYETHYLENE TEREPHTHALATE GLYCOL (PETG) SOLID SHEETS

PLAZGAL PETG sheets are made from Polyethylene Terephthalate Glycol. Combine excellent transparency with toughness and excellent chemical resistance. The great advantage of PETG sheets over other transparent thermoplastic sheets is their ease to handle, machine, fabricate and print allowing a greater freedom of design. Moreover, their low temperature thermoforming without pre-drying allows for easy and cost-effective thermoforming.

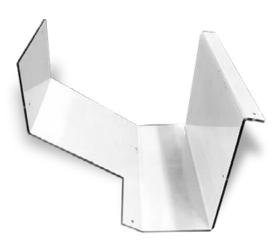
## Main advantages:

- High clarity and light transmission
- Excellent impact strength
- Ductile excellent toughness
- Excellent flexibility
- Easy to clean Chemically resistant to most common cleaners
- Lightweight. About half weight of glass
- Easily to handle, machine and fabricate allowing design freedom
- Easy to print on
- Cold curving capability
- Easy to thermoform
- Odor free
- Halogen free
- Fully recyclable
- UV protection for outdoor use available upon request

## Applications:

- POP displays
- Vending machines
- Machinery guards
- Supermarket trolley shelters
- Signing
- Glazing







Typical Properties	Method	Units	Value		
General					
Density	ISO 1183	g/cm³	1.27		
Water Absorption	ISO 62 (1)	%	0.2		
Flammability (thickness dependent)	UL94		HB, V2		
Mechanical					
Tensile Stress at Yield	ISO 527-2	MPa	53		
Tensile Stress at Break	ISO 527-2	MPa	26		
Elongation at Break	ISO 527-2	%	> 60		
Tensile Modulus	ISO 527-2	MPa	2100		
Flexural Strength	ISO 178	MPa	70		
Flexural Modulus	ISO 178	MPa	2200		
Impact Resistance (Charpy unnotched)	ISO 179/1fu	kJ/m²	NB		
Impact Resistance (Izod notched)	ISO 180/1A	kJ/m²	11.5		
Optical					
Refractive Index	ASTM D542		1.57		
Light Transmission (3 mm transparent sheet)	ASTM D1003	%	90		
Haze (3mm transparent sheet)	ASTM D1003	%	< 1		
Thermal					
Vicat Softening Temp.					
1 kg Load	ISO 306	°C	83		
5 kg Load			78		
Heat Deflection Temp.					
0.45 MPa	ISO 75	0	72		
1.80 MPa			68		
Coeff. of Linear Thermal Expansion	ASTM D696	mm/mmºC	70X10 <sup>-6</sup>		
(0-50°C)	ASTIVI DU90	11111/111111-C	70/10 -		
Electrical					
Dielectric Constant					
1kHz	ASTM D150		2.6		
1MHz			2.4		
Dissipation Factor tan					
1kHz	ASTM D150		0.005		
1 MHz			0.023		
Dielectric Strength (Short Time, 500 V/sec)	ASTM D149	kV/mm	16		
Surface Resistivity	ASTM D257	Ohm/square	>1016		
Volume Resistivity	ASTM D257	Ohm.cm	>1015		

Please note that the technical values given in the table are typical values for guidance and they are subjected to certain variability. All values (unless otherwise specified) at room temperature.



#### PLAZGAL PETG

Dimensions		
Thickness	0.75 – 5.0	mm
Width	1000, 1220, 1250	mm
Length	600 – 6000	mm

Sheets are also available cut to size, according to customer requirements

Grades		
Plazgal PETG	Non-UV protected	for Internal use only
Plazgal PETG UV	UV coextruded	one side only
		(specific thicknesses)

All information, recommendations or technical advice given in this technical sheet, is given in good faith, to the best of our knowledge and based on our present experience and procedures. However, no liability or other legal responsibility is assumed for the full adequacy, accuracy or completeness of this information. We reserve the right to make any changes, according to technological progress and further developments. The customer is not released form the obligation to conduct careful inspection and testing of incoming goods.

Product design using Plazgal PETG sheets must be carried out only by qualified experts in the sole responsibility of the customer. Performance should be verified by testing, carried out only by qualified experts in the sole responsibility of the customer.

